

American



Farmer,

AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY

"O FORTUNATOS MINIMUM SUI SI BONA NOBINT
"AGRICOLAS."

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For the American Farmer. ON PUBLIC ROADS—No. V.

In a country of recent origin, as Maryland may be termed, the antiquarian and others fond of historical research, would suppose, that the mode by which its roads were laid out by the early emigrant, and gradually extended, altered, changed and widened to suit the growing wants of the community, and the increasing internal commerce of the earlier settler, would be spread upon record, and the manner in which the forest was penetrated, the desert made to smile, the Indian war path changed to the horse and sledge road, and the latter yielding to the post and army road, would be a matter of facile examination, as well as curious research. Such an inquirer would be sadly disappointed. He would find an interminable waste around him, where no flower bloomed, or evergreen reared its head, to cheer the way-lost traveller on his desert path. He might pour over volume after volume of manuscript with untiring perseverance, and find nothing to reward his industrious activity, but an empty title of a law, the body of which was long since consigned to destruction. Printing was still in its infancy, and its clumsy mechanical apparatus so unwieldy and expensive, that few engaged in it, as artists or mechanicians. The first attempt to give publicity to the laws in a regular, speedy and general manner was in 1727, by an act of Assembly "for the speedy and effectual publication of the laws of this province; and for the encouragement of Wm. Parks of the city of Annapolis, printer." Three editions of the Laws had been printed before that time, if they could be honored with that title, which did not profess in their title pages to contain the whole, but only such as were supposed to be in force. Thus professing on their very front, the ignorance of the compilers, and the darkness in which they had to grope. In truth there is no compilation of the Maryland statutes whose accuracy can be relied on, until that of Bacon, printed at Annapolis in the year 1765. That man with indefatigable industry, reduced into system a chaotic mass "*rudis indigestaque moles*" of provincial laws, which would have confounded the common mind, and have deterred any one whose habits had not been in early life trained in the pursuit of knowledge through devious paths, and over heights almost inaccessible.

The first act relating to public highways was passed in 1666, ch. 12, entitled "An act for marking highways, and making the heads of rivers, creeks, branches and swamps, passable for horse and foot." This title is all that remains of it. The next act was passed in 1669, ch. 13, with the same title, and like its predecessor has passed into oblivion. I have examined the record books containing the acts of Assembly passed during these years, viz. Lib. W. H.—W. H. & L.—and C. & W. H.—and can find no such laws. The titles have been preserved by Bacon, but he refers to no book where the law itself can be seen, although singularly particular in such references. From which omission I conclude that the reverend and venerable author* knew only of their previous existence, from subsequent continuing or repealing acts, or the imperfect remains of legislative proceedings. The first acts on record are 1671, ch. 23—1692, ch. 39—1699, ch. 13—and which vary but very little from each other. By these acts

* He was the Pastor of St. Anne's Church, Annapolis.

it was ordered, that all public roads and main roads be cleared, and well grubbed, fit for travelling, twenty foot wide; and good and substantial bridges made over all heads of rivers, creeks, branches and swamps, where need shall require, at the discretion of the justices of the county courts, who were authorised to set down and ascertain in their records, once every year, what were the public roads of their respective counties, and that no person should change or alter such roads without proper authority, under a penalty of 500 lbs. of tobacco. The manner of marking these early roads was peculiar to the age, and descriptive of a new country. All roads leading to any ferry, courthouse, church, or leading through any county to Annapolis, were to be marked on both sides the road with two notches; if the road went to Annapolis, the road at the leaving the other road, was to be marked on the face of the tree, in a smooth place cut for that purpose, with the letters AA set on with a pair of marking irons, and colored; and so with two notches all along the road. Any road in Talbot county, leading to the port of Williamstadt (now Oxford) was to be marked with W and so with two notches all along the road. The roads that led to a court house were to be marked with two notches, and another notch a distance above the other two. Any road leading to a church, was to be marked at the entrance, and leaving any other road, with a slip cut down the face of the tree, near the ground. If leading to a ferry, to be marked with three notches; and if the road passed through any seated plantation or old fields, then the overseers were to set up posts, so many as might be perceived from one to the other, to be marked and notched as aforesaid; as were the posts of all gates, through which any road passed. And the overseers were required from time to time, to fall all dead trees on each side of all main roads, whose limbs should hang over the road, to prevent any damage that might happen from their falling on travellers.

Our forefathers were very attentive to furnish travellers with indices or pass-ones to prevent mistakes upon their journey, which their more enlightened and better civilized descendants entirely omit. Who has travelled in these our modern days, but at every step has been in doubt whether he was going; and what evinces in a most astonishing degree either their laziness or domestic industry, will not see a human being from whom he can inquire the way. Such are the improvements of modern times, and such the luxuries of modern travelling.

Annapolis.

JAMES BOYLE.

For the American Farmer.

THRASHING MACHINES.

William Brown, while feeding a machine for thrashing wheat, was severely injured, and come near being killed by the bursting asunder of the cylinder, which was of the kind called *open*, constructed of cast iron heads, and wrought iron bars, secured by the bands of the same. Mr. Brown was struck by one of the bars about the hips, with such force as to be thrown a distance of 12 feet. The injury was so severe as to fracture the bones, and confine him to bed for six weeks.

This is another added to the many accidents (if accidents they may be called) from the disruption of rapidly revolving bodies, such as mill-stones, grind-stones, and the cylinders of thrashing machines. These accidents are only the natural consequences of well known principles in natural philosophy. All bodies cohere by different degrees of tenacity; thus lead coheres much less tenaciously than iron. The centrifugal force of all revolving bodies is proportionate to their density, or specific gravity, and to their celerity of motion. Then, without any allowance for flaws or defects in the materials, of which re-

volving bodies are composed, there is, according to the above laws, a maximum of speed, beyond which a disruption of parts is just as sure and natural a consequence as the explosion of gunpowder by the juxtaposition of fire.

There are no substances in nature which might not be dilacerated or disrupted by the centrifugal force of highly accelerated motion. Weight, or specific gravity, though it may add strength to the revolving body, will also add to the probability of disruption; on the contrary, light bodies, such as cork and pith, would require an almost inconceivable velocity to cause their parts to fly asunder.

It is difficult to say what kind of cylinder for a thrashing machine would be most safe; as none have yet been invented which in their use have proved free from danger. I should think it just as important to prove a new machine, before purchase, as I would to prove a new gun before use. If the machine would bear double the speed usually applied, it might be thought safe. When human life is so much endangered as it is known to be by a use of these machines, all the skill that wisdom and experience can supply; all the caution that prudence can suggest; and all the ingenuity that science can elicit should be called into active and energetic exertion in their construction.

Harford County, Jan. 1843.

WHEAT—Kloss' White Blue Stem—and Valparaiso.

We are indebted to the Hon. H. L. Ellsworth, for two small parcels of Wheat, which we shall be happy to exhibit to the inspection of our friends. They bear the names at the head of this paragraph; for the origin and properties of the first, the reader is referred to the subjoined letter of Mr. Snyder; its berry is plump, thin skinned, of fine color, and, as appears by the statement of Mr. S. of great weight. Of the sample of Valparaiso wheat sent us, we can only say, that the grains are very large, and as slightly as one could desire them to be. Of the productiveness of these varieties of wheat we know nothing, but if it bear a just relation to their appearance, we should be disposed to think they will prove valuable acquisitions to the country.

In acknowledging this acceptable present, we but obey the dictates of our heart when we say, that the agricultural community owe a lasting debt of gratitude to Mr. Ellsworth, for his untiring zeal, unflinching perseverance, and unceasing efforts to further their interests.

Patent Office, Jan. 26, 1843.

To the Editor of the American Farmer.

Sir: I take pleasure in transmitting a very beautiful sample of "Kloss' White Blue Stem" Wheat, and refer to the Hon. John Snyder's letter for a description of its origin and properties. The same letter will inform those desirous of a larger quantity, where to apply. I also send a sample of Valparaiso Wheat, just received from South America. I am, most respectfully, yours,

H. L. ELLSWORTH.

Hon. H. L. Ellsworth, Commissioner of Patents.

Dear Sir: The bushel of Wheat I have sent you is the produce of my county, Union, Pennsylvania. Its origin is briefly this: My neighbor, Christian Kloss, saw, in his field of Blue Stem wheat, a single Topproud head: he was struck with the contrast between it and the wheat of the whole field, this being the only white head in it, and much the largest. At harvest time, he secured the head and seeded it in his garden the coming fall; (I do not recollect the time, perhaps six years since;) he divided the next year's produce amongst his neighbors, and

last fall there was perhaps 1000 bushels of this seed sown; one farmer had 400 bushels: it is called Kloss's White Blue Stem. The wheat I send is the growth of last year; it will be recollected our country was filled with rust and smut,—this wheat escaped, yet, it is not quite as full in the grain as the crop of the preceding year. It weighs 65 lbs. per bushel. We have the Mediterranean wheat in our country—the White Blue Stem is considered far superior. Hoping it may prove useful to the agriculturist, it being Pennsylvania staple, I hazard nothing in recommending it as the best wheat in the northern part of the State, and quite the best I ever saw.

Jan. 18/4, 1843.
It is a Fall Wheat.

JOHN SNYDER.

RUST IN WHEAT.

[The following letter is published at the instance of the gentleman to whom it was addressed, the more willingly in consideration of his reply, and because the correspondence may lead to some further discussion of the important subject to which it relates. The rust is, beyond doubt, by far the most formidable drawback upon the wheat crop with which the farmer has to contend. At the moment when his hopes are highest, it spreads as a cloud over his fields, and disappoints him of the reward of his labors. We would request our correspondents to examine into the causes of this disease, and if they know of any remedy or preventive, to communicate it for the general good. If our own views are correct, we should expect that the use of marl has had a happy effect in guarding against its ravages. Will some of our readers inform us on this point?—Ed. Far. Reg.]

Chesterfield county, Nov. 23, 1842.

WILLIAM M. PEYTON—Respected friend—
While I have the pen in hand, is not Roanoke a limestone county? I should suppose your soils were destitute of calcareous matter, from the fact that you are equally subject to the rust in wheat as we are in lower Virginia. I infer at least that such is the fact, from thy letters in the Southern Planter. As far as my observation extends, lime is an effectual preventive of the rust. Putrescent manures and clover lays, on the contrary, almost always induce it if the season be at all unfavorable at the critical period of ripening. The reason I take to be this: putrescent matter, by furnishing more food than the plant can elaborate, produces a state of plethora, which results in the extravasation of the sap at the season of greatest vigor. This indeed I understand to be thy theory. The tendency of lime is to check this redundancy of growth, by providing in some way the specific food of the plant. Whether this be done by enabling it to decompose carbonic acid with greater activity, or by furnishing it with silicate of lime, or by contributing to the development and formation of the grain, rather than to an exuberant vegetation, cannot perhaps be determined. When I was in the great wheat growing district of western New York, some years ago, I saw fields of wheat that I was told would yield 25 or 30 bushels to the acre, which I could not have supposed, from any previous observation, would have produced more than 10. The soils of that region, being of a diluvial formation, are so rich in calcareous matter, from the former attrition of the lime-rocks scattered over the country, that they frequently effervesce with acids. The stem had so little blade that it appeared almost naked. Plaster of Paris, which has been recommended as a protection against the rust, though it be lime in another form, does not contribute much to the formation of grain. Its tendency is eminently to increase the bulk of vegetable growth, and therefore, when it acts on wheat, to induce rust and mildew. To guard against the rust then, such application to the soil appears necessary as would afford specific nourishment to the seed. In every analysis of wheat there is found a portion of lime. There are also some manures that furnish the specific ingredients, but those only I believe which are concentrated in their energy. I have read nothing lately which sheds more light on the distinction I have attempted to draw, between manuring for the grain and manuring for the straw, than the detail of some experiments with guano by J. E. Teschemacher, of Boston, and contained in his address to the Horticultural Society. Some plants treated with guano, the balsam for instance, produced very inferior flowers; but not a flower missed bearing its seed vessel, and every seed vessel was filled with perfect seeds; while other plants of the same species, and growing under the same circumstances, with the exception of the guano, had

only a portion of the seeds perfect in each pod, though the flowers were very fine.

There is a neighborhood in Maryland which I occasionally visit, the inhabitants whereof form a little community of intelligent and industrious farmers, who mostly belong to the same society of which I am a member, namely, that of the Friends or Quakers. They do their own work; and when one works with his own hands, he is more likely to make both ends meet. They find it to their interest to haul lime from six to ten miles to apply to a soil by no means naturally fertile. The crops of wheat on their timed lands are invariably good, and but little affected by rust.

A few years ago, a friend of mine, in an adjoining county, planted an acre or two of ground in pumpkins. The vines were so much infested with bugs that he sprinkled caustic lime over the leaves for the purpose of destroying them. In the fall the lot was seeded to wheat, and at the ensuing harvest the locality of every hill was conspicuously visible. In each spot where the lime had been applied, the straw was bright and of a golden color, without the least appearance of rust; while in every other part the wheat was completely ruined. If it is not too late in the season, I would suggest the trial of a small piece of ground with lime or ashes, if it was no more than a few yards square. Ashes would be as beneficial as lime, for they afford potash. With great respect,

T. S. PLEASANTS.

Big Lick, Roanoke, Nov. 27, 1842.

DEAR SIR. As there is nothing connected with the wheat crop which affects its successful culture so seriously as its liability to rust, I have felt disposed to throw into the common stock my mite of observation and experience, in the hope that others would pursue the same course, and that in the end some useful result might be attained by a comparison of the different views. My own notions, as developed in the different publications alluded to by you, have been that it results from a plethora, induced by excessive vegetation. That whilst some modes of cultivation, and especially the habit of applying the strong, stimulating manures of the stable and farm pen, would augment the tendency to rust, and other modes would partially ward it off, no skill could avert it entirely in some seasons. In my essay of July, in the Southern Planter, I say that rust never appears until the wheat has attained its full growth, and when there is nothing left for the leaves and stem to perform but the elaboration of the juices for perfecting the seed. When plants have reached this point, every physiologist knows that they require no further extraneous aid in the formation of their seed. The ovary has performed its office, fructification has taken place; and the gradual concentration of the juices of the leaves, stem and roots in the seed, producing the death of the former, is all that is required. Before attaining this state, excessive vegetation only produces excessive growth; but when the plant is fully developed, and nothing more required for the maturation of the seed, but a slow, gradual, and regular supply of duly elaborated sap, if there should then happen a warm, damp spell of weather, a succession of sunshine and showers, an inordinate flow of sap is at once produced, which destroys the consistency which is then so necessary to the grain, and you distend the vessels to such a degree, that they burst of their repletion, and exude upon the surface. Should this occur when the wheat is in the milk state, it is destructive of the grain, which perishes for the want of proper nourishment.

In these and other views of the same essay, the very sensible editor of the American Farmer concurs, so far as the nature and causes of rust are concerned, but dissents qualifiedly from the conclusion to which "my premises and reasoning would lead." In this you and he seem to agree, though you reach the same point by contrary roads.

The editor of the American Farmer, after wisely substituting bland vegetable manures for the strong putrescent manures of the barn-yard, suggests the application of gypsum, as an auxiliary agent in preventing the too rapid decay of the vegetable matter. He is led to this suggestion by the present received explanation of the action of this mineral. Liebig says, as quoted by him, "that the action of gypsum really consists in its giving a fixed condition to the nitrogen or ammonia, (food of plants,) which is brought into the soil, and which is indispensable for the nutrition of plants." He adds further, that the decomposition of gypsum by carbonate of ammonia does

not take place instantaneously; on the contrary, it proceeds very gradually, and this explains why the action of gypsum lasts for several years. From these quotations, the editor thinks it fairly inferable that the plaster would act as a retarding principle, and thus enable them to regulate the supply of nutriment to the crop. My letter, which was partially published in the November number of the Planter, was intended to give some reasons and some experiments in opposition to the editor's theory. Without presuming to question the soundness of Liebig's views, but on the contrary adopting them unqualifiedly, I thought they might be reconciled with my own in this way. Gypsum requires to dissolve it from 300 to 500 parts of water, and when dissolved, it decomposes very slowly under the action of carbonate of ammonia; of course this slow and gradual process is calculated to fix the ammonia in the soil. But then, on the other hand, plaster attracts a vast amount of floating nitrogen or ammonia from the atmosphere, thus increasing the agent of decomposition (carbonate of ammonia) greatly. A large portion of the peculiar food of plants would thus be disengaged, so that under the action of plaster you would have a large amount of ammonia fixed in the soil, and a larger amount appropriated by the plant, than you would have if it were not employed. This explanation accords with our experience of the influence of this manure, the "tendency of which," as you say, "is eminently to increase the bulk of vegetable growth, and therefore, when applied, to induce rust and mildew."

Concurring with me as you do thus far, you here fall back upon the position of the American Farmer, and suggest lime as an effectual preventive of the disease. To answer this great end, you suggest that the remedy should be such a one as would afford specific nourishment to the seed. Every analysis of wheat exhibits lime and phosphate of potash among its constituents. This would bring us back again to the plaster of Paris, which is a sulphate of lime; but experience has shown, as you justly say, that this does not contribute much to the formation of seed, but acts more especially on the stalk and leaves. Lime, however, in other forms, both calcined and as it exists in the highly concentrated manure which is termed guano, has, you think, the desired effect on the seed. The experiment of J. E. Teschemacher, of Boston, is certainly very striking; while your own experience of the influence of calcareous applications in Maryland and other localities does certainly carry with them a force and weight which it is difficult to resist. Previous to the reception of your letter, I had seen it stated with great confidence, in the "Dollar Farmer" of Kentucky, that ashes were an infallible protection against rust; and I have instituted a set of experiments upon wheat sown this fall to test it. I will now add some experiments with lime, and give you the results of both next summer.

Roanoke county is a limestone soil, the best portion of it, within the memory of its oldest inhabitants, having been a prairie, which, according to Mr. Ruffin's theory, would show that our soil is strongly impregnated with lime, and which, with your theory added, should exempt us from the rust. We however have it, though I think we are not peculiarly liable to it. Kentucky, however, which is the purest calcareous soil I have even seen, does seem to be peculiarly subject to this disease; so much so that her farmers have, to a very great extent, abandoned its cultivation as a staple.

I hope, sir, you will continue to investigate this truly important question, with all the industry and research of which you are capable. Keep public attention alive to it until some useful and satisfactory result is reached, and you will have conferred a lasting benefit upon the community, which will entitle you to their warmest gratitude.

WM. M. PEYTON, Roanoke.

SMUT IN WHEAT.—One word respecting smut in wheat. When I was first acquainted with this country, being a boy, the wheat raised here was all smutty, so much so that it required to be washed before it was fit to use. The first year we sowed the wheat procured in the neighborhood, which was smutty, for seed, the crop was very smutty. The next season some for seed was procured from a distance, clean of smut; this wheat was washed clean, and while wet, as much good ashes was mixed with it as would stick to the wheat, and sown immediately. The crop was clean of smut, and for more than twenty years in succession we practiced the same way on the farm. We procured wheat clean of smut, washed and ashed the seed, and during the whole time

never raised a crop of smutty wheat. I have more than once sown beside my neighbor's lot, nothing but a fence dividing us,—he sowed his wheat dry and I as I have stated—his was very smutty, mine quite clean. All this time winter wheat was sown, and occasionally spring wheat; and to this time, which is more than sixty years, I never have raised a crop of smutty wheat, when I observed the above rule; or procured wheat clean of smut, ashed, &c. Once I had some spring wheat somewhat smutty; and it was from smutty seed. For a number of years of the time I speak of, there was no lime in the country, otherwise lime would have been used instead of ashes, as we have done since lime has become plenty.

A CLAREMONT FARMER.

From the Albany Cultivator.

THE IMPROVED CULTURE OF COTTON—No. 2.

Messrs. Gaylord & Tucker—"Condition and circumstances," says the Cultivator, "should not control us. We should mould them to suit our wills." A truly laconic sentiment this; the grand importance of which I have well and long since considered. And though I acknowledge to the fullest extent the force and justice of such decisive resolve as a governing principle, and regard it as the very "*sine qua non*" to certain success, in the practical operations of the agriculturist, yet he must be a Lacedemonian indeed, over whose stern prowess circumstances may not occasionally exercise a leeward influence.

Engagements of an urgent character, and without my control, have caused the delay of this number, which, with the advanced stage of the season, render it necessary that I change the order of my original design, as previously indicated in communicating with you upon "the improved culture of the cotton plant;" and instead of giving you the principles and philosophy of the system, &c., according to my views of the peculiar characteristics of the plant, under the various circumstances of soil and culture, I propose devoting this paper to "the details of the modus operandi by which my experiments have been conducted, together with the character and quality of the soil, &c." for the timely convenience of those kind friends, and other gentlemen, in the cotton region, friendly to agricultural economy and improvement, who may have exercised only faith enough in the system, *acting wisely*, to make the experiment.

In commending this improvement, gentlemen, to the planting interest of the country especially, and previous to going into the details of its practical application to the culture of cotton, permit me to call the considerate attention of your readers in the cotton region by a few brief remarks to two very obvious facts that exist, palpably destructive to the best interest of the cotton planter—the direct effect of the present system of culture. In the first place, I remark, that under the system of the country, the maximum production of cotton, at a ruinous cost, has equalled that of its consumption; which is generally admitted, I believe, to be the principal cause of the low prices of the article, which general admission also agrees that such prices pay very little, if any profit, upon the immense capital vested in its production. I remark, again, upon the disproportionately large amount of inferior and poor cotton thus produced, as compared to the good, which, upon the authority of both merchant and planter, may be safely set down at from three to four bags of poor, to one bag of good cotton. This fact, so abhorrent to the natural order of all vegetable perfection, produces a state of feeling and an influence in the cotton market prejudicial to the real value of cotton, and consequently to the interest of the planter. These are plain matters of fact, and must have excited the attention of planters in some degree, especially the latter, which I suppose to have existed to a very injurious extent for at least the last quarter of a century.

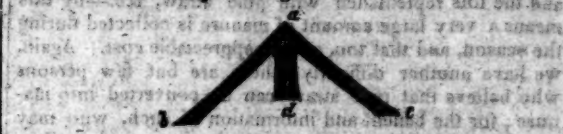
To meet both these difficulties, and to convert them in a direct reverse ratio, into sources of profit, constitutes but a part of the advantages which this improvement offers to the cotton planting interest of the country. It proposes to meet and obviate the former difficulty by producing, as previously stated, the present and necessary amount of cotton, with but one-third the cost or capital now engaged in its production; furnishing thereby to the planter a direct and net profit of over 100 per cent upon the present market price. To illustrate and prove this position will be a part of the object of another number. Again; by subjecting the cotton plant to this system of improvement, which favors its natural arborescent growth, and the more perfect development of its staple and great prodigality, the

latter difficulty is obviated and the preponderance changed, as clearly shown by my experiments, in favor of an infinitely superior staple: thus the planter receives nearly an entire crop of strictly prime cotton, upon the influence of which the market price becomes established, and its tendency favorable to the planting interest. I have not room here to do more, at present, than merely to call attention to these facts. I now proceed to the immediate object of this number.

This improvement, when it shall have attained its highest state of perfection, contemplates the "*system of rotation*" in planting, under which the land designed for cotton lies the previous year in the state of fallow, which is found by experience most favorable to the growth and fruitfulness of the plant. I commence the preparatory operations for planting about the 1st of March, by spreading upon the land broadcast two to three hundred bushels of manure per acre,—light stock yard and stable compost. I then run off the land in rows of three feet with a scooter plow, opening a good furrow some three to four inches deep; this done, I take a large size shovel plow and cross the scooter furrows by rows, running at right angles, of five feet wide. I am now prepared to commence manuring in the hill, having first ascertained that I have 2940 hills on each acre, which will require, by giving each hill a half gallon of manure—same kind of compost—184 bushels nearly, which I haul on the land in a cart, first graduated to a certain number of bushels, and with spades likewise prepared for the purpose, I deposit the requisite quantity of manure in each hill. By this means, which in practice will be found simple and expeditious enough, I give four to five hundred bushels of manure to each acre—an infallible insurance for 5000 lbs. of a superior staple per acre. As the manure is placed in the hill by rows, the wide way, a short distance in advance, a good plow hand follows with a turn plow, which should run into the soil from six to eight inches deep at least; and turn well, with which four furrows are thrown together on each row: thus fixing the half gallon of manure in each hill, entirely within the region of constant moisture. This gives me a fine, large bed, and well broke, to lie until at or about the first of April, when the cotton seed should be planted. This is done by first opening the bed as shallow as possible, with some instrument such as that described by M. W. Philips, Esq. in the March number of the 9th vol. of the Cultivator. This I prefer to any other instrument of the kind I have ever yet seen, since its depth of furrow may be graduated to a positive certainty so as to avoid disturbing the manure in the hill; it should not be opened out deeper than one inch. The bed thus opened, and the seed previously rolled in leached ashes or sand, which answer very well, though I prefer a compound of two parts of ashes to one of common salt, made moist with water; the seed, well rolled in this, are carefully dropped over the manure. Eight to ten seed in a place will answer to secure a stand. There will be no difficulty in dropping the seed over the manure in the hill, when it is recollected and observed that upon the unbroken space of some two feet between each row, the scooter furrows will be found an unerring guide to the manure in the bed at distances of three feet. The seed thus dropped I prefer to have covered with a hoe, *lightly and carefully*; bearing in mind this golden truth, that "a crop well planted is half made." Immediately after planting, the middles or unbroken balks should be plowed out. The crop of cotton thus planted, which should not exceed three to four acres to the hand, may be performed in good time and well done. In a few days, say nine to twelve, the cotton will be up, presenting a most healthy and thrifty appearance. The next operation to be performed, as early as possibly convenient, is to plow out the middles well, the wide way, with a good shovel plow, having first run around the young plant with a scooter plow. The hoe hands follow and thin the cotton down to two stalks, giving it a small quantity of soil. This operation well done, the plant is at once placed beyond all danger, since its tap-root will now have taken such hold upon the manure below as to enable the plant to out-strip either grass or weeds, having yet to spring up.

Under this treatment, the time-consuming and worse than useless operations of bar-shearing, scraping and chopping out, are saved, as much to the benefit of the tender plant, as to the interest and economy of the planter; in despatching the hurry and push at this stage of the crop; and at the conclusion of this first working, I have my cotton growing off and doing well. I have now no further use for a plow in its subsequent culture, but use

the sweep,—a kind of horse-hoe,—I call it a sweep in the absence of a more appropriate name, an idea of which, may be had from the subjoined figure.



This instrument is easily made by any blacksmith, by laying the wings *a. b.* and *a. c.* upon the point of a scouter *d.* in the form of an isosceles triangle, which is fastened upon the chip of a shovel plow stock, by a heel pin, in the same manner you would a shovel. From the tip of the wing *b.* to that of *c.*, it should be 2 feet, forming a kind of horse-hoe, by which a row is swept out at 3 furrows. This should be so curved and graduated upon the stock as not to go into the soil deeper than 1 inch, and as much less as possible, to enable it to cut the young grass and weeds that may be springing up. The great and singular advantages of the sweep over all instrument of the plow, harrow, or hoe kind that I have ever used, are these,—that it will kill a greater quantity of grass and weeds in a given time, and do less injury to the surface roots of the plant, so essential to its progressive prosperity. The horse-hands following this instrument, thin the cotton to a stand, one stalk in a place, and draw up a small quantity of soil to the standing plant. The entire subsequent culture is performed with the sweep and hoe, which should simply scrape and pulverize the surface, so as to kill any grass and weeds that may appear, and allow a free circulation of atmospheric air to the fibrous roots of the fruiting stalk, requiring at this critical period all the aid and nourishment that culture, soil and atmosphere can afford. By the first of July my cotton stands from 5 to 6 feet high, and I have it topped by the 10th at farthest, after which I run the sweep once more through it, and the hoe if necessary, to remove any grass, that may have sprung up immediately above the stalk. After this, and by this time frequently in places, the cotton will become so much interlocked, and the ground so shaded, as to keep down all other vegetation—yet it may be found necessary again to chop about in places with the hoe, when the cotton may not have locked so early. This should be invariably attended to. This brings us again to the season of harvesting the staple.

Let no planter prejudice and reject this system, upon the score of simplicity, supposing the process too simple to accomplish the object proposed; first, act wisely, make the experiment, and try it. Strictly follow this plain and simple process, and if the land does not reward your pains-taking, with five or six fold the quantity per acre, of a superior staple, than has at any previous season been taken from it, in its natural state, I will present the experimenter with one bushel of my improved seed, with which to perfect the experiment. At another time I propose devoting a paragraph to the importance of selecting and improving cotton seed.

It will be observed that manuring constitutes a large item, in this system of improvement, a source of revenue too much underrated by planters, and consequently too much neglected, because the subject requires a little extra attention—which attention is so essential to the prosperity and well-doing of a farm. Nor, gentlemen, have I seen any thing better said, or more true, than I find in the sentiment, under the head of "*a few queries*," in the last December Cultivator, where you remark, to the planter and farmer: "In your manures is your gold mine, more valuable than any of the Carolina ones, and you should be anxious to increase them accordingly." But I hear some planters say—"It is impossible to produce so much manure"—this is, however, the result of inexperience, and the want of determination. I am entirely convinced, from my experience in making manure, that it is not only practicable, but a perfectly easy task, to prepare upon every plantation in the cotton region, great or small, 1500 bushels of an excellent article of compost, per annum, to the hand—at a cost of less than two cents per bushel—by the assistance of the stock of horses, cows and hogs, upon properly arranged lots. This is done by having the lots well littered, by throwing in pine straw, in large quantities and frequently, or oak leaves, where the pine straw is not to be had, with cotton and corn-stalks, &c. and occasionally haul and scatter upon the litter, a few loads of muck or marl, one or both of which may be found on or near every farm in the country; upon these lots, pen and feed your stock every night. The manure

thus prepared, should be collected in pens or pits, three or four times during the year, after heavy falls of rain, and the lots replenished with pine straw, &c.—by this means a very large amount of manure is collected during the season, and that too, at an appreciable cost. Again, we have another difficulty, there are but few persons who believe that pine straw can be converted into manure; for the benefit and information of such, who may read this, permit me to quote a single sentence from Liebig's celebrated work upon agricultural chemistry: "The bark and foliage of oaks contains from 6 to 9 per cent of potash. The needles of firs and pines, 8 per cent." But it is not on account of the potash exclusively, that I prefer pine straw, to all other vegetable matter in the preparation of manure;—since it possesses another invaluable quality above all others, in absorbing the juices of the manure, which are thus saved from evaporation, and readily applied to the land. I doubt not but a single year's experience will convince every intelligent planter of the innumerable advantages of this improvement, and its perfect adaptation to the culture of cotton and other crops.

I will now close this number by a very few remarks upon the character and quality of the soil upon which my experiments have been conducted. It is high ridge land, readily recognized, and its quality distinctly understood, in our southern country, under the name of "forked-leaf, black-jack, pine-barren," a deep, porous, sandy, superstratum, lying under a tolerable good clay, at a distance of 2 to 3 feet below the surface. A true picture of nature, and naturally poor enough. This land, under the treatment above detailed, grew my cotton, from which I have gathered a greater number of pounds per acre, (indeed almost double,) than I have ever seen recorded, is in its natural state, inferior to the average quality of cotton land, by at least one half. I might refer you, if necessary, to more than one hundred gentlemen, planters from Georgia and Alabama, who have examined my experiments carefully, and several of them, at various stages of its growth, and with one general consent, pronounced it a fair test, and a great improvement. I have, from several stalks that grew on the three acres, in the proper places, taken 3½ to 4 lbs of cotton, carefully weighed. In the perfection of this improvement, yet in a state of great crudeness, when every stalk upon the acre, (2,940,) shall mature equally well, what may I reasonably calculate to gather?

"Nil desperandum,
Possunt quia, posse videntur."

N. B. Cloud, M. D.

Planter's Retreat, Ala. Dec. 26, 1842.

MADDER.—The proprietors of small farms in the Grand Duchy of Baden, cultivate madder, of late years, with much success and profit. The plant requires a rich soil, free from weeds, and the roots yields a beautiful and durable red color only when it is permitted to attain to perfect maturity in the soil—which is not till the close of the third year of its growth. Roots of one year's growth are indeed used in Avignon, but the dye prepared from them is not durable; and that from two year old roots is very little better. Good madder, yielding a rich and durable dye, can be prepared only from roots not less than three years old; and if two of the summers were very hot, the dye will be the brighter and more permanent. When it happens that the summers are unusually cool, the roots are not taken up till the close of the fourth season. Southern plants, acclimated and cultivated in northern latitudes, require great care and judgment in their treatment, to prevent deterioration; and the madder plant does not appear to be an exception.

[Two of the long growing seasons of Louisiana we think would be equal to three of those of the Grand Duchy of Baden. Ed. Am. Farmer.]

Chinese method of propagating Fruit Trees.—Strip a ring of bark about an inch in width, from a bearing branch, surround the place with a ball of fat earth, or loam, bound fast to the branch with a piece of matting; over this suspend a pot or horn with water in it, having a small hole in the bottom just sufficient to let the water drop, in order to keep the earth constantly moist. The branch throws new roots into the earth just above the place where the ring of bark was stripped off. The operation must be performed in the spring, and the limb or branch should be sawed off and planted out at the fall of the leaf the ensuing autumn.

THE AMERICAN FARMER.

PUBLISHED BY SAMUEL SANDS.

THE RUST IN WHEAT.—We insert in this number, a correspondence between *Thos. S. Pleasants* and *Wm. M. Peyton, Esq.* upon the above interesting subject, and as the latter gentleman refers to views which we formerly expressed in commenting upon an article of his which appeared in the *Southern Planter*, it may be proper to remark that we coincided with him in opinion as to his assigned cause of the *Rust*—plethora or excessive vegetation—but respectfully dissented from the conclusion which he drew of the disease being without remedy, and suggested the probability that, by deep ploughing, early sowing, and the use of bland and mineral manures, the disease might be prevented. We deem this brief explanation necessary to a full understanding of Mr. Peyton's views. We are highly pleased to find, that he has commenced a series of experiments, with a view to test the efficacy of lime and ashes in preventing attacks of rust, and shall look forward for his report upon the subject with great anxiety, as we feel confident there is no gentleman better qualified than he is to conduct and carry them out satisfactorily.

CULTURE OF COTTON.—The second number of Dr. N. B. Cloud's essays on the culture of Cotton, is published this week. Much interest having been awakened in regard to this subject, the present essay will be read with avidity, the Dr. having changed his plan of communication by reversing the order originally contemplated, giving now the practical details, in order that advantage may be taken thereof in time for the next crop, and reserving the theoretical part for future numbers.

As our journal extensively circulates in the cotton growing States, we lose no time in transferring this paper to our columns from the *Cultivator*.

¶ We had selected an article on the grafting of the grape, for the information of a correspondent who desired it, but are obliged to defer its publication till our next.

We take occasion to refer those wishing to form vineyards, to the advertisement of Dr. Underhill, of N. York, on another page. Those whose position in the country renders it inconvenient to obtain the vines direct from N. York, can be supplied through the agency of the publisher of this paper.

Second Massachusetts Agricultural Meeting.—The sketch which we copy to-day, upon this subject, is interesting. The remarks of Col. Jacques, upon the science of breeding, is peculiarly so, and will attract the attention of the reader.

Such meetings and discussions by the members of State legislatures must exercise the most wholesome influence over the interests of husbandry, bringing together, as they do the agricultural intelligence and practical experience of the whole state, to be disseminated from one common point, throughout all its veins and arteries, and diffusing thus expansively every thing that is important to be known, or which may be calculated to shed light upon that glorious calling which nurtures and sustains all others. May we not hope then, in all the freshness and sincerity of our heart, that the laudable example set to their brethren throughout the confederacy by the members of the Massachusetts legislature, will find its way to the bosoms and approbation of all. Surely the delegated wisdom of the States should need no nobler example to stimulate them onward in so good a work. How incomparably preferable is it, for those who are appointed to watch over the interests and promote the well-being of their constituents, to be devoting their leisure evenings to the discussion of questions connected with the improvement of the soil and the advancement of agricultural science, than to spend

them in political coteries, engaged in the furtherance of schemes of partizan warfare. While the first tends to cement the bonds of brotherly affection, to promote the comfort and secure the happiness of the whole people, the latter encourages the growth of enmity and uncharitableness, and at best, perhaps, can but subserve the sinister purposes of some heartless demagogue, who, in his soul, would not care if all others sank so he could swim.

METHOD OF MAKING GREEN VEGETABLES INTO MANURE.—The following process for converting green vegetable substances into manure is said to be practiced with success in the counties of Norfolk and Suffolk, England:

Place a layer of vegetable matter of any given length and breadth, a foot thick, then a thin layer of lime, and so on alternately until the pile be made of sufficient size. In a few hours, the decomposition will commence, and unless prevented by the application of sods or other green vegetable matter will burst out into a blaze; this must be guarded against. In 24 hours the process will be completed, when the manure will be found to be made.

Weeds, sods or turf, of any description, will answer, but they should be used as soon after being cut as possible, and the lime should be fresh from the kiln.

¶ We learn that piles of vegetable matter have been erected on the farms of D. M. Perine and Wm. G. Howard, esqs. on the York road near this city, under the superintendence of Mr. Gouliart, for the purpose of testing to the satisfaction of the farmers of Baltimore county, the value of the system of making manure within a given time, upon the principle generally understood as Bommer's—but which is of French origin, and not invented by him whose name it bears. Due notice will be given of the opening of the heaps, when the public will be invited to attend.

BURNT CLAY.—As there may be many situations where the soil may have become exhausted of its calcareous matter, and where it may not be convenient or practicable to procure either lime or ashes, we deem it proper to state, that in all such situations, a very good substitute may be found in burnt clay, the ashes of which, if properly burnt will prove a most excellent manure and tend to improve the texture of the soil whether it be a stiff or light one. In all clays there are more or less of undecomposed vegetable matter, which under the operation of fire becomes converted either into ashes or carbonaceous matter, while the clay itself becomes in a measure deprived of the power of cohesion. The ashes thus made serves to restore to the soil the potash of which it may have been deprived; the charcoal imparts to it the power of absorbing from the atmosphere and rains much valuable volatile substances, which would otherwise escape, and the clay imbibes additional power to take in and retain moisture, while its loss of the power of cohesion, renders it, mechanically valuable as a disintegrator of any tenacious soil to which it may be applied.

Having thus briefly noticed some of the properties of burnt clay, and recommended it as a substitute for lime, or ashes, where it may not be practicable to obtain either, we shall now lay down a simple process for burning clay.

In the first place, cut a sufficient number of square pieces of clay, say 6 inches wide by 12 long, to form four diagonal flues, say 20 feet long by 15 feet wide; when those pieces or blocks of clay are dry, form your flues or alleys with them about 3 feet apart, taking care to cover them at top with other blocks of clay. In the intervals between these alleys, and over their tops, to the height of about 3½ feet, place dry brush wood cut up into fine pieces, weeds and refuse grass, then place clay over the top of the whole about a foot deep at the sides, and more at top, so as to give to the heap a cone-like form, then close up the mouth of all the flues but two on the windward side; this done, set fire to the kindling. As the fire progresses, throw on clay from time to time, in small quantities, and repeat this as often as may be necessary, which must be regulated by the intensity of the burning. Should

the wind veer about, it will be necessary to open the mouths of the pipes on the windward side and close up the others. Should the fire burn through in any part, put on clay or earth promptly, so as to close it. The body of clay may, by attention, be raised by occasional feeding to any convenient height, as after a kiln, thus formed, is fairly underway, no additional wood will be required as the clay will burn of itself. But it is necessary to supply additional clay in small quantities, as the fire gets near the outward and upper surfaces, it being important to prevent it from breaking through. After the mound shall have been thus raised to the desired height, and permitted to burn for a day or two, it will require no other watching, but may be left to complete its own work. It will, however, be safest to cover it three or four inches deep with fresh clay before leaving it. In a few days afterwards the ashes will cool down, and be in a state to be spread on the land. 200 bushels will be a good dressing for an acre.

We have thus spoken of burnt clay as a substitute for lime or ashes, where neither of the latter substances can be obtained; but we deem it due to candor to say, that every farmer who can procure lime should do so, though he may be compelled to borrow the money to purchase it; for of a truth, it will return him compound interest, on his outlay. There are but few things that will justify a farmer in borrowing money to procure them, and at the very head of these we place lime. If lime, like the philosopher's stone, will not convert every thing it may touch into gold, it will enable the farmer, who may use it, to double his products, and thereby acquire upon the same amount of land and labor, a much greater quantity of that which will bring the precious metals, so that, tho' lime does not possess the property of converting that with which it may come into contact into gold, yet it may be said to be the agent of creating it.

If ten bushels of lime be added to every hundred bushels of clay ashes, their value will be greatly increased.

THE KYLOE CATTLE—COLMAN'S EUROPEAN TOUR.—At the stated meeting of the Philadelphia Society, for promoting Agriculture held on the 1st instant, the following among other proceedings were had.

"A paper by the chairman was read on the merits of the *Kyloe* breed of Cattle, from the Western Islands, and Highlands of Scotland, and a portrait of a fat heifer exhibited, five years old, three feet five inches high. The peculiar merits of this breed consists in its hardihood, subsisting on scanty food, and aptitude to take on fat and flesh when removed to the rich lowlands of Scotland, and cultivated fields of England, and is well worth the attention of extensive breeders of cattle in New York, and the Western States, as the stock would supply the deficiencies of good beef in the Summer, after the large cattle of the preceding year had been killed, and before the fall stock are fit for market. They would pay well for a special voyage to bring over several head. Some observations were in conclusion made upon the economy and quick profit attending the feeding of the *Kyloes* over the large cattle, which require more than one winter or one year to be stall fed before they are fit for the butcher, and which often do not repay the owner for the cost of feed and attention.

Henry Colman, Esq., of New York, was present at the meeting, and stated that he was about to make an Agricultural tour through England, France and Germany, for the purpose of ascertaining the actual state of farming, and all modern improvements in farming machinery in those countries, an account of which he intended to publish and send home in successive parts. Mr. C. is a practical farmer, and has made an agricultural survey of the State of Massachusetts by an order of the Legislature, the account of which is contained in four large octavo volumes, and from a conviction of the certain benefit which the farming interest of the United States will receive from his tour, the Society subscribed for forty copies of his intended publication.

We hope the enlightened farmers of this State will not be behind hand in sustaining the praiseworthy object

of Mr. Colman. Several gentlemen have handed in their names to us, and we hope, before the departure of Mr. C. (latter end of March) we will be enabled to forward him a goodly list, worthy of the Monumental City, and of good old mother Maryland, one of the glorious original Thirteen, whose honor, we trust, will ever be cherished by her true hearted children.

Subscription papers are left at this office, also with Dr. G. B. Smith, and at Knight & Colborne's bookstore.

Rules worth being observed by Farmers.

1. Perform every operation in the proper season.
2. Perform every operation in the best manner.
3. Always keep your implements and tools in the best order.
4. Finish one job before you begin another.
5. After finishing a job always return your tools to their proper places.
6. Don't put in a crop too large to cultivate well.
7. Personally attend to every operation, and see that it be effectually done.

Cure for a Burn—Did you say you had burnt yourself?

Yes.

Have you any burn salve?

No.

What do you mean to do for your burn?

Why, I've ordered some burn-salve to be made.

Have you any writing ink in the house?

Yes. Why do you ask?

Because, if you have ink, you have already at hand a most excellent remedy for a burn.

Ink good for burn?

Yes, I've cured myself a hundred times with it.

How do you apply it?

Dip a fine piece of linen, or cotton rag in the ink, and cover the burn with it, and as fast as the ink dries saturate the cloth with it, without uncovering the burn.

What good will grow out of such an application?

Why it will extract the fire and cure your burn—that's all.

Cure for a Cough or Cold.

Take 1 oz. of Hoarhound

1 oz. of Indian Turnip

1 oz. of the green leaves of the yellow Pine

1 oz. of St. John's wort,

and boil the whole in a quart of water, down to a pint, over a slow fire; then strain the liquid and make a syrup of it, by adding thereto a half pound of loaf sugar and simmering it over a slow fire for ten minutes. Of this syrup take a teaspoonful in a wine glass of water four or five times a day, and again at bed time. Should the cough prove distressing at night, a spoonful of it may be given every two hours, and by rubbing the throat and breast with a stimulating liniment, to be made of the spirits of hartshorn and sweet oil, the cure will be greatly accelerated, through the power of the latter, of diverting the irritation from the internal to the external surface.

The Northampton (Mass.) Courier says that Mr. Oliver Warner, of Hadley, harvested the past season, from eighteen acres, peat meadow land, twenty-one hundred and sixty-one bushels of corn, (twenty-four barrels to the acre!)

WHITE CARROTS.—This is a new species of that valuable root, and from its uncommon productiveness must be an important acquisition in field root culture. For milch cows, and any other stock it is a cheap and rich food. From our own experience we are enabled to say, its growth excels the common orange carrot in its yield. Unlike others, it projects several inches out of the ground, like the sugar beet, or long turnip. In rich soil with deep tilth, the production is enormous. Twenty-two tons are said, by the American Agriculturist, to have been raised per acre this year in Massachusetts.—*Farmer's Cab.*

GUANO MANURE AND POTATOES.

We have before alluded to this new manure, which is exciting so much interest in England, as one of the most efficient yet known. In C. W. Johnson's great work, the *Farmer's Encyclopedia*, now publishing in numbers, we find under the article *Guano*, some facts which, as exhibiting several matters comparatively, are of interest to the farmer, we give for the benefit of our readers. From a series of careful experiments, Mr. J. considers 35 bushels of Guano equal to 70 loads of good rotted manure, in its effect upon crops. Guano, it may not be amiss to add, is the dung of sea fowls, and found on some islands in the Pacific, on the shores of Peru. Considerable quantities have been imported to England, and as the quantity is apparently inexhaustible, the use of it promises to extend rapidly; it consists of the most active ingredients, bone earth, uric acid, ammonia. The experiments of the table below were made by Gen. Beaton; and in every instance 35 bushels guano, 35 loads of horse dung litter, and 35 loads of hog dung litter per acre, were used. The potato was the root planted, and the table will show in what manner.

Large Potatoes planted whole.

Depth planted.	Guano. bush.	Horse. dung.	Hog. dung.	Simple soil.
12 inches deep,	499	492	408	397
9 " "	466	460	427	327
6 " "	554	583	447	395
3 " "	531	479	414	311

Large potatoes cut in pieces.

12 inches deep,	505	648	369	275
9 " "	557	589	434	382
6 " "	559	531	466	408
3 " "	557	511	375	414

Middle eye of Potato cut out.

12 inches deep,	382	479	298	163
9 " "	376	479	298	210
6 " "	576	563	495	237
3 " "	453	382	485	343

Small Potatoes planted whole.

12 inches deep,	492	401	592	360
9 " "	557	512	525	440
6 " "	528	583	544	570
3 " "	557	414	440	440

The comparative produce in lbs. of potatoes from these manures, was therefore as follows:

Guano,	639
Horse dung,	626
Hog dung,	534
Simple soil,	446

The effect of different depths in planting, is as follows, in the total produce of bushels in each depth; a difference worthy the notice of the farmer, as showing that a depth of six inches is better than one greater or smaller.

12 inches deep,	7,181 bush.
9 " "	6,828 "
6 " "	8,177 "
3 " "	7,108 "

Another result is shown in this experiment, and that is, the difference in the crop where large or small potatoes, whole ones, or cut, are employed in planting. In General Beaton's experiment, the advantage is greatly in favor of small potatoes planted whole; and there are not many farmers in this country, who maintain the same position.

Large Potatoes planted whole,	7,390 bush.
" " cut in pieces,	7,620 "
Middle eye of Potato cut out,	6,230 "
Small potatoes planted whole,	8,464 "

[Cultivator.]

SECOND AGRICULTURAL MEETING AT THE MASSACHUSETTS STATE HOUSE, Jan. 30.

Mr. King, of Danvers, (Speaker of the House) took the Chair and made a few appropriate remarks on the honor conferred on him, and the pleasure of discharging the duties of the chair when surrounded by farmers. The subject for discussion, "Breeding Farm Stock" was taken up.

Mr. Buckminster remarked that he did not intend to say much, as he is talking every week through his paper, and what he should say here would be only a repetition. He was in favor of our native stock for the dairy. It is better than the Durham. This is the famous crack stock; they doubtless have their good qualities.

Mr. Meriam said that every farmer should have some one distinct breed of neat cattle. This is very important to him who raises cattle for the market.—Our country is new and too many experiments are made on stock. It is important that cattle should be well matched. We can breed them alike in color, horns, form, &c., and so that they will walk alike. When well matched a pair of oxen will bring 25 per cent more. The dyer must have his colors pure, so that he may mix them and produce any desirable color.—So with blood in stock. Like produces like; this is an unerring principle in nature. This applies not to external appearance, but blood. Great changes have been made in sheep by crossing. In the human race natural propensities and blemishes are perpetuated, such as cross eyes and six fingers. In some cases these are not in the parents but they were in the ancestors. Color is under the control of the breeder, he can make white disappear and substitute black, or the reverse.

Col. Jaques, of Charlestown, said that he had made numerous experiments in breeding and he could breed to order, giving any color or form desired, that is consistent; he would not undertake to produce animals with two legs up and two down. He has had 50 years experience, made experiments first on rabbits, in breeding about 400, he found that he could take those of four distinct colors, black, white, yellow, and gray, and blend them together, so that they would all be on one animal; then from this race of mixed colors, he could breed back and get the four original distinct colors on different animals. In breeding the strongest strains will predominate. From his experiments he had a favorable opinion of Durhams to cross with our native breed. These last are a mixed race that cannot be depended upon like the blood stock.—He gave 600 dollars for a Durham bull calf, and then he looked for a cow of the native breed. He found one, such as he wanted, and from these he produced a superior breed, which he called the Cream Pot breed. We may have cows in Massachusetts that will produce 10 to 15 pounds of butter per week. Now some cows make 8; others 4, on the same keep. There are no properties in our native sheep desirable to retain; but in our cows there are. The famous Oakes cow produced 410 lbs. of butter in one season. Her offspring of the second generation showed some properties like herself.

Col. Jaques was asked whether he had accomplished his object; whether he could produce cows that would make ten pounds of butter per week. He replied that he commenced breeding neat stock in 1820; that it took four years to procure a half-blood, four more for a three-fourths blood, &c. It was a slow process, and required a long time to accomplish such important results. He was asked whether he had bred any cow that was better than the Groton cow, the native breed which he commenced with. He said that he had one that gave three quarts more milk, at milking. Then the question was, whether that cow was not larger than the native cow; to which he replied that she was 100 pounds heavier.

Col. Jaques said that he had fed mostly on hay and grass; Indian meal was destructive, it wears cows out too fast.—Some that have had six quarts a day for a year or two, have failed in milk and nothing would renew it. Ruta baga is injurious to milk. Mangel wurtzel does not improve the milk, but it increases the quantity. Ruta baga is good for other stock. Potatoes are the best roots. He finds that feeding roots is too much labor. Carrots are best for milk cows and horses. Wheat bran is excellent on carrots;—but would prefer two bushels of meal and one of bran to three of meal.

Col. Sheldon, of Wilmington, said he had kept Durham stock about 20 years.—They were not so good milkers as our native stock; but for beef and work were better. Some think they require high keeping, but not so. He got a neighbor to keep one awhile. He at first objected, as he supposed that the Durham were nice feeders. On experiment, he said he was a fool and did not know good hay from bad, as he eat all up promiscuously. He said that the inherent qualities of the animals was in the opposite sex in the offspring. The male resembling the dam, and the female the sire. So we should select a bull from a good milker; if we would have excellent milking properties in the offspring. He had more regard to the appearance and form of animals than the breed.—Durham cattle are docile—spirited, but not high tempered. Mr. S. then gave the marks of good working oxen. We copy his remark on this subject at a previous time, which are more at length:

"Forward legs should be straight; toes straight forward,

hoof broad, not peaked, distance short between ankle and knee.

These properties enable the ox to travel on paves, and hard ground.

Full breast, straight on the back, round rib, projecting out as wide as the hip bones, these are indications of strength and good constitution.

In opposition to the above, we find the short faced ox, starts quick at the whip, but soon forgets it.

If the ox toes out, the strain comes on the inside claw, and when travelling on a hard road, he will be lame at the joint between the hoof and the hair. When the toes turn out, the knees always bend in. The crooked knee ox is apt to become lame by holding heavy loads down hill.

Comparison—a straight stick, when set on one end, will bear up more weight than a crooked one.

The ox with very large horns near the head, is apt to be lazy, and will not stand the heat of the day. The black eyed ox is apt to run away; oxen working in the same yoke should carry their heads on a level with each other.

Oxen working on a stone-drag, and on the foot of a plough, on the sled spire or cart spire, twitching stones or timber, should carry their heads well up, as it will enable them to do this kind of work much easier. Oxen that work as leaders forward of other oxen, should carry their heads low."

Subject for discussion, next Monday evening—"Root Culture."

From the New Genesee Farmer.

BLACK CANKER ON PLUM TREES.

In the last number of the Farmer, Mr. W. D. Cook alludes to the extensive prevalence of "Black Canker," among Plum Trees, and inquires "what is the cause."

We should be much pleased ourselves to hear Mr. Cook's query satisfactorily answered, but fear, from the comparative ignorance that prevails on the subject of vegetable diseases, that neither he nor any of us will be gratified for some time to come, with a definite and satisfactory solution.

There have been numerous theories advanced in the endeavor to account for the cause of this canker. Some argue, but seemingly to us with very little propriety, that it is caused by the atmosphere; reasoning in this way, that a sudden change from heat to cold produces a morbid circulation of the sap, which results in the formation of this gum or canker on the weaker or more horizontally inclined branches, while the strong and vertical branches or parts of the tree remain unaffected.

Others say that it is caused by a deficiency of saline material in the soil, which renders the sap or juice of the tree so unnaturally thick that it ruptures the small sap vessels of the weaker branches; the sap exudes and is formed by the atmosphere into gum. Others argue that it is caused by the roots of the tree penetrating into notchy, unfruitful subsoil in which is imbibed deleterious food, causing various diseases, and among others the "Black Canker" spoken of. It is the opinion of some of the most eminent Horticulturists of the day, that it is caused by the coldness of the soil into which the roots have penetrated.

The opinion is quite general and may be correct, that these excrecences are produced by an insect puncturing the bark for the purpose of depositing its eggs. If this be so, the surest remedy is to prevent the increase of the insects, by timely destruction of the affected parts.

We take the following from "Lindley's Theory of Horticulture," one of the best books of the kind ever published:

"Mr. Reid, of Balcarras, has indeed shown, that one of the causes of canker and immature fruit, even in orchards, is the coldness of the soil. He found that in a cankered orchard, the roots of the trees had entered the earth to the depth of three feet; and he also ascertained that, during summer months the average heat of the soil at 6 inches below the surface was 61 degrees; at 12 inch. 57 degrees; at 18 inches 50 degrees; and at 3 feet 44 degrees. He took measures to confine the roots to the soil near the surface, and the consequence was the disappearance of canker, and the ripening of the fruit."

We have, during the last few years, found many statements of a similar character, in European Horticultural publications, and from these, as well as our own experience, we are induced to believe that canker, as well as many other diseases to which trees are liable, are contracted through the roots; indeed, it is quite clear, that if the roots of the trees are buried too deeply beneath the sur-

face; deprived of a large supply of nitrogen, and imbibed food of a deleterious nature from cold ungenial sub-soil, unfruitfulness or disease, or most likely both, will ensue. We cannot expect to find trees in a healthy or flourishing state, except they receive some ordinary degree of attention.

We know how animal life and health suffer from maltreatment—how necessary a regular and abundant supply of healthy food is; with regard to vegetable life it is equally so. If we but consider the manner in which the greater number of these cankered or gummy plum trees that attracted Mr. Cook's attention, and that have often attracted our own, are treated, we will not be surprised at their condition. The great bulk of them are of the "Common Blue Damson." With an occasional exception, they have stood since they were planted, or which is quite as likely since they happened to spring up from seed without receiving the slightest attention, either by way of pruning, or improving the soil around them; the earth in most cases, is completely exhausted with suckers and seedlings, which form a thicket for several feet on all sides.

From observation, we are inclined to believe the Blue Damson, so generally found around the country, is much more subject to the "Black Canker," than other varieties; for we generally find it to be the first to show signs of it.

We have seen but very few instances of the fine varieties of plums, properly taken care of, troubled with gum or canker. In our nursery, where we have 40 or 50 different kinds growing, the smallest particle has not yet made its appearance; and in gardens around the city and throughout the country, where choice varieties are cultivated with care, no canker or gum is to be found. It is only where utter carelessness is manifested with regard to fruit trees, that we find the branches loaded with these gummy excrecences. Whoever wishes to keep clear of it, must plant their trees carefully, not too deep; they must keep the earth in proper order around them, remove suckers regularly when they make their appearance; and when a limb becomes affected, pare off the part, or if a small limb, cut it off and burn it forthwith. No tree affected by it should be propagated from in any way, either by suckers, scions or buds. Where trees have become affected by it, they should be immediately dug up and burned. Healthy trees should not be planted near cankered or gummy ones, for we have good reason to believe it is infectious.

Such roots as may have grown too deeply in a bad sub-soil, may be easily cut off by digging down at a sufficient distance from the tree, not to injure the horizontal roots, and striking under with a sharp spade.

Where trees have been neglected, and the earth around the roots exhausted, a trench should be dug around the extremities of the roots, and filled with a compost of well-rotted manure and good surface soil, all diseased and dead limbs cut off, and the whole tree should be washed with soap suds and well brushed, to remove moss, &c. With such treatment they will recover their health and vigor, and in one year, through their increased fruitfulness, pay for all the trouble.

BALTIMORE MARKET.

Hogs.—The supply of live Hogs has not been so large during the week, as previously, and prices have advanced a little. Of 600 head that have been in market, much the largest portion has been taken by butchers at \$3.62½ and in some cases at \$3.75 per 100 lbs.

Cotton.—A sale of 200 bales Upland at 7½¢ cents on time.

Cloverseed.—Sales of best lots continue to be made from store at \$3.75 per bushel. We quote at \$3.25 to \$3.75 as in quality.

Molasses.—There is no New Orleans in first hands, and no demand. A sale of N. O. Sugar House at 26 cents in barrels.

Sugars.—We have no transactions of moment to report. The stock of hand of New Orleans in first hands is less than 300 hhds, we quote this description nominally at \$4.50a5.50.

Tobacco.—The market this week has been quite dull and the transactions in Maryland Tobacco confined to very trifling lots at former prices which we continue, viz: inferior and common Maryland \$2.50a3.50, middling to good \$4a6; good \$6.50a8; and fine \$8a12. Ohio Tobacco is almost without demand. We quote as before, viz: Common to middling \$3a4.50; good \$5a6; fine red and wrappery \$6.50a10; fine yellow \$7.50a10; and extra wrappery \$11a13. The inspections of the week comprise 28 hhds. Maryland; 32 hhds. Ohio; and 4 hhds. Missouri—total 64 hhds.

Cattle.—Upwards of 500 head of Beef Cattle were offered for sale at the Scales this morning, of which about 350 were taken by the butchers at prices ranging from \$2.25 to \$3.50 per 100 lbs. on the hoof as in quality, which is equal to \$4.

50a6,50 net—Of the balance 56 were driven North and about 100 remain in the market unsold.

Flour.—Sales of Howard street Flour of good standard brands were made from store on Saturday at \$3.50. To-day the market is inactive, and we are not advised of any sales. The receipt price is unsettled.

Holders of City Mills Flour ask \$3.75 per bbl. but we hear of no transactions.

Grain.—Limited parcels of Wheat received by wagons sell at 70a75 cts, for good to best reds. No Corn afloat for several days. A sale of 2000 bushels white, from store, was made to-day at 41 cts. No transactions in Oats.

Provisions.—We note sales of some parcels No. 1 Western Lard in kegs to day at 6 cents full. Sales of prime western assorted Bacon have also been made at 41 cents. Baltimore cured Bacon is held as follows, viz: Hams at 71a8 cents; Sides at 44 cents, and Shoulders at 44a45 cents. We are not advised of any sales of Beef or Pork; and we quote nominally as before New Baltimore packed Mess Beef at \$8.50a9; No. 1 at \$7a7.50; Prime at \$5.50a6; New Western Mess Pork at \$9.50; New Baltimore No. 1 at \$8.50, and Prime at \$7.50.

New Orleans, February 4.—Cotton—But little business has been done in consequence of the expectation of news from Europe. The quotations are 44a45 for inferior to 9a11 cts, for good and fine. Sugar—Sales of about 500 hds at 21a44 cts.

Mobile, February 4.—Cotton—The total sales of the week have been 21,800 bales, generally at an advance of 1a2c, on the prices of last week. The advance was caused by the holders of Alabama money becoming alarmed, caused large investments to be made in Cotton. We quote ordinary 51a61, middling 61a7, middling fair 71a71, fair 8a81 cts. per lb.

Philadelphia, February 10.—The Flour market remains in the same inanimate state before reported, the few sales made being at prices ranging from \$3.75a3.87a chiefly at \$3.81 per bbl. one parcel extra at \$3.91. Rye Flour dull at \$2.75. Penna. \$2.25 per bbl. Brandywine \$2.50 and \$11.50 were the last sales for bbls. and hds. There has been very little done in Grain of any kind this week, and no receipts of Corn or Oats from the South, prices remain nominally at 38c. for white, and 42c. for Southern yellow flat Corn; Penna. Corn is worth 46c. per bush; do Wheat from 80 to 82c. per bushel. Southern Wheat 75c. per bush. There were 530 head of Beef Cattle in market this week; 450 from Penna. 80 from Virginia. Sales at 41a51c, and extra at 51c—all sold. There were 60 head of Virginia Cattle sent to New York, and a number of sales were made at the drove yard, over Schuylkill—80 Virginia head were sold at Thompson's drove yard at 2 3-8, live weight. Hogs—200 in market, sales from 34 to 44c. all sold. Sheep 1450 at market, all sold at \$1, \$1.50 to \$1.75; extra \$3.50.

New York, February 10.—Exchange on Alabama has advanced to 25a30 per ct. discount.—There is a steady demand for Cotton, the sales averaging 1200 bales per day—good fine qualities are very firm, and in some instances a shade of improvement may be noticed—common qualities are heavy. Flour is exceedingly dull.—The only sales I heard of to-day were 300 Pennsylvania at \$4a4.12a, and 400 New Orleans at \$4.18a.

At Wilmington, (N. C.) on the 8th inst. Turpentine sold at \$1.28; Tar 80c; red oak hhd. staves at \$7a7.50 and \$8; white oak bbl. do \$10; Shingles very fair at 85c; Corn 52a55c per bushel. Business generally very dull.

At Alexandria, on the 11th inst. the wagon price of Flour was \$3.30, no sales from stores. Sales of red Wheat from wagons at 60a66c, and of Corn at 35a38 per bushel.

At Cincinnati, on the 8th instant, Pork was selling at \$2a2.25 per 100 lbs.—the packing season was nearly over; mess Pork \$6.25; clear do \$7; Lard 44c, Flour \$2.65a2.68 from store and canal, receipts light, Wheat 45c, Cloverseed \$2.87a3.

POUDRETTE.

PRICES REDUCED for this valuable fertilizer.

The New York Poudrette Company, having enlarged their works have now on hand a good supply of a first rate article, which they offer in parcels of ten barrels or more at \$1.50 per barrel, or three barrels for \$5—delivered on board of vessels.

Orders, enclosing the cash, will be promptly attended to if addressed to

D. K. MINOR,

118 Nassau street, N. Y.

N. B. The farmers of Maryland, who reside near navigable water, will do well to enquire into the value of Poudrette as a manure. Those who have used it need no argument in relation to its value—and the best evidence which those, who have not used it, can have is to procure a few barrels and apply it to their Corn, Tobacco, Melons, &c.—Seeing is believing.

Feb. 1

The subscriber is Agent for the above Company, and will receive and forward orders for Poudrette, at the prices named above; cost of freight and any other necessary expenses being added. The cash in all instances to be paid when the order is left. Gentlemen in the country who cannot receive it direct from N. York, will have it forwarded from this port in any manner they may direct.

Feb. 1

SAM'L SANDS.

SAXONY EWES.

A flock of 50 or 60 Saxony Ewes, of the very finest quality, bred by one of the most eminent breeders in Maryland, (and whose name alone is a sufficient guarantee of his stock being the best,) is offered for sale, in lots or to suit purchasers, at \$4 per head. Apply to

SAMUEL SANDS.

LIME FOR AGRICULTURAL PURPOSES.

Having accumulated a large stock of first quality Oyster Shell Lime, at my kilns on the Potomac River, I beg leave to say to the Farmers and Planters generally, and more especially to those who are anxious to improve their lands, and have been deterred from doing so by the scarcity of money and low prices of their produce, that I will sell them lime, delivered on board of vessels at the kilns, either at Lancaster's Tide Mill, near the mouth of the Wicomico River; Lower Cedar Point, or Pickawaxin Creek, at 61 Cents per bushel, payable March 1st, 1844; (if ordered, deliverable between this date and 1st of August next,) or I will deliver it on the above terms, charging in addition the customary freight, which must in all cases be cash. Orders addressed to me, at Milton Hill Post Office, Charles County, Md., will receive prompt attention from

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WM. M. DOWNING.

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PLOUGHS.

WITHEROW & PEIRCE'S PATENT CYCLOIDAL PLOUGHS. With wrought iron shares and steel cutters, to which the Baltimore County Agricultural Society awarded the premium for the best furrow plough, at their ploughing match in November last.

For sale by **ABRAHAM BUCKWALTER**, 277 West Baltimore street Baltimore.

P. A. & S. SMALL, York, Pennsylvania.

And by the subscriber in Gettysburg, Adams Co. Pa.

S. WITHEROW.

The subscriber also proposes to sell on reasonable terms, Shop rights, Township, County, or State rights, to make and vend the above ploughs.

Feb. 1 7c

BENTLEY'S AGRICULTURAL STEAM GENERATOR MANUFACTURED BY BENTLEY, RANDALL & Co.

Manufacturers of Bentley's Convoluted Steam Boilers, Baltimore, Md. for steaming Corn Stalks, Hay, Potatoes, Boiling water, &c. It is also highly recommended to Tanners for steaming Leaches, also for various manufacturing and mechanical purposes, where steam or large quantities of hot water is required. This article is made wholly of iron, and was got up expressly to meet the wants of the Agricultural community, and it is confidently believed that for simplicity, durability, economy in money, fuel, time, and room combined its equal has not been offered to the public. It possesses all the principles of the most approved Tubular Locomotive Boilers, for saving of fuel, while the construction is such that one of equal size, strength and durability that has heretofore cost \$100, or more, is now offered at \$45. It is operated equally well with Anthracite coal as with wood, and can be removed by two persons at pleasure.—Prices No. 1 \$45, considered of capacity enough for ordinary Farm purposes; No. 2 \$60, No. 3 \$75.

BENTLEY, RANDALL & Co.

McCauland's Brewery, Holliday, st. near Pleasant.

We have the liberty of referring to the following gentlemen, viz:—David Barnum, Esq. City Hotel; Captain Jackson, warden of the Maryland Penitentiary, and Doct. Robt Dorsey of Edw., where they can be seen in operation.

Agents, J. F. Callan, Esq. Washington City; Capt. John Brooks, Upper Marlboro', Prince Georges' Co. Md. where samples can be seen. For numerous testimonials in favor of the above call on the manufacturers or their agents.

N. B. B. R. & Co., are also agents for Murray's Corn and Cob Crushers. Balto. Md., Dec. 1842.

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AGRICULTURAL MACHINERY & IMPLEMENTS.

The subscriber begs leave to assure the public that he is prepared to execute orders for any of his agricultural or other machinery or implements with promptness. His machinery is so well known that it is unnecessary to describe the various kinds, but merely annex names and prices:

Portable Saw Mill with 12 ft. carriage, and 24 ft. ways and 4 ft. saw,	\$300
Extra saws for shingles, with 3 pair of head blocks,	125
Post Morticing Auger,	15
Bands,	10
Horse Power of great strength,	200
Corn and Cob Crusher, wt. 600 lb.	65
Thrashing Machine, wt. 300 lb.	75
Corn Planter, wt. 100 lb.	25
Thrashing Machine, wt. 600 lb.	150
Grist Mill, 24 ft. cologne stones,	150
Do. 3 ft. do.	175
Belts for the same,	15
Post Auger, wt. 15 lb.	5
Tobacco Press complete, portable,	85
Portable Steam Engine, with portable Saw Mill and cutting off Saw,	3500
Large Sawing and Planing Machine with cutting off saw, or cross cutting for large establishments,	1100
If made of iron,	3000
Large Boring and Morticing machine for large establishments	150
Tenoning Machine	300
Vertical Saw	125
Small Morticing Machine, suitable for carpenters.	25

All of which articles are made in the most superior style of workmanship, of the best materials, and warranted to answer the purposes for which they are intended. It cannot be expected that the subscriber can speak of the merits of the above enumerated articles within the compass of an advertisement. Suffices it to say, that each have found numerous purchasers, and proved entirely satisfactory. The Portable Saw Mill with a 10-horse power engine, can cut, with perfect ease, 10,000 feet of lumber a day, and, if necessary, could greatly exceed that quantity.

GEORGE PAGE,

West Baltimore street, Baltimore, Md.

pamphlets containing cuts with descriptions of the above named machines, can be had on application (if by letter post paid) to the subscriber, or to Mr. S. Sands, at the office of the American Farmer.

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THE SUBSCRIBER.

Who exhibited the Corn and Cob Crusher and Grinder at the Agricultural meeting, having rented the Wheelwright & Blacksmith shop with the water power attached in the village of Franklin, will continue to build his Corn and Cob Crushers and Grinders, and has so improved them that persons who have not got horse powers can use them by hand power with sufficient facility to supply the wants of small farms, and with one or two horse powers can do more work than any other machine for the same purpose that will require double the power. This is not puffing, for it can be and has been made manifest. The price of the crusher is \$40.

He is also prepared to do all kinds of repairing to Agricultural or any other kind of machinery at the shortest notice.

Horse-shoeing and blacksmith work in general, done in the neat and strongest manner, all of which he warrants to be good.

Orders for any of the above machines can be left with Mr. Sands at the office of the American Farmer, or with the subscriber.

au 24

WM. MURRAY, Franklin, Balt. Co. Md.

MURRAY'S CORN & COB GRINDERS.

The following testimonials will speak for themselves as to the value of my Corn and Cob Grinder. At the late Fair at Govanstown it ground at the rate of 15 bushels an hour.

Price of the hand crusher 20 to \$25, large ones for horse power 35 to \$45.

JAMES MURRAY,

York, near Light st. Baltimore.

GUILDFORD FARM,

Baltimore County, Feb. 23d, 1842.

Dear Sir: Since your Crusher was bought, Oct. 30th, 1841, it has had a fair trial, and I take pleasure in recommending it as a valuable machine. It will grind 10 bushels per hour with ease, or 12 if I should choose to hurry it.

Yours,

SAML. WILSON,

for Genl. McDonald.

KENT Co. Md. March 5th, 1842.

Mr. Jas. Murray:

Dear Sir: Since you sold me a Corn and Cob Grinder last January, I have had a fair opportunity of testing its merits. When the corn is dry it will grind 12 bushels per hour the day through; this was done on the farm of Mr. A. W. Ringgold, in the presence of several gentlemen who stood by and saw the corn and meal both measured.

Yours,

G. H. WILSON.

CHESTERTOWN, 26th April, 1842.

Sir: I am pleased to have it in my power to speak of your Crusher in terms of very strong commendation.—Since last fall when it was purchased, it has supplied food for my horses, 15 or 16 head, without the slightest derangement, and without the cost of one farthing to rest or repair, except to put an iron rim on the old pestle, the cost of which will be perhaps 12 cents. In a few hours we fill up a large feed chest, and it is of so much value in my estimation, that I would not be without it for a sum greatly beyond its cost.

Yours,

E. F. CHAMBERS.

Mr. Jas. Murray, Millwright.

PORTSMOUTH, Va. June 6th, 1842

Mr. James Murray.

Dear Sir: As you wish to know what your hand crusher will grind by horse power, I now state to you what I have done since I bought it. With one horse I have ground 10 bushels in one hour and a quarter, and my small black boy can grind 6 bushels per hour all day through. In my opinion it is an excellent machine.

Yours,

WM. FORBES.

BALTIMORE COUNTY, Oct. 31st, 1842.

Mr. James Murray.

Dear Sir: After a full examination and trial of the small Corn and Cob Crusher I bought from you, it gives me great pleasure to recommend it to the farmers generally, as such a machine has long been wanted—and I think the wishes of the farmers are fully met in your valuable improvement. My overseer says that it ground a half bushel of dry corn in two minutes with one mule.

Yours,

RICHARD FRISBY.

The three first named machines, cost each \$40, the others \$25 each.

jan 11

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SMALL FARM NEAR BALTIMORE—FOR SALE.

About 25 ACRES OF LAND, near the York Road, about 3-4 of a mile beyond Govanstown, and within a mile of the Academy. The soil is of the kindest nature, and susceptible of the highest improvement. The improvements are, a Stone DWELLING of 8 Rooms; Stabling for several horses and cows; large Corn House; Milk House; Poultry Houses, &c.—excellent Water at hand, a young Orchard of 4 or 500 of the choicest Fruit Trees; Apples, Peaches, Cherries, Plums, &c., and a large number of Raspberry bushes, Strawberry vines, &c.

ALSO, about 70 ACRES adjoining, 40 of which are now set in Clover, and about 15 or 20 in Wood. The Land is of the same kind as the above; is most beautifully situated, and in the best neighborhood in Baltimore county—it has several fine Springs on it, and a stream of water running through it, and would suit admirably for a Market or Dairy Farm, or for a gentleman's Country Residence. They will be sold together or separate, and immediate possession given. For terms and other particulars apply at the American Farmer office.

Feb. 1.

ISABELLA GRAPE VINES.

Of proper age for forming vineyards, propagated from and containing all the good qualities which the most improved cultivation for over ten years has conferred on the vineyards at Croton Point, near Sing Sing, N. Y. are now offered to the public. Those who may purchase will receive such instructions as will enable them to cultivate the Grapes with entire success, (provided their locality is not too far North.) All communications, post paid, addressed to R. T. Underhill, M. D., No. 400 Broadway, New York, will receive attention. He feels quite confident that he has so far ameliorated the character and habits of the grapevines in his vineyards and nurseries, by improved cultivation, pruning, &c., that they will generally ripen well and produce good fruit when planted in most to the Northern, all the Western, Middle and Southern States.

TO AGRICULTURISTS AND OTHERS.

THE SUBSCRIBER, with the assistance of WM. BAER, Esq., Practical Chemist and Agriculturist, will analyze Soils, Minerals, Earths and Waters.

AGRICULTURISTS can have their soils visited and analyzed by the year or single analysis.

AGRICULTURAL SOCIETIES can be accommodated with a course or single lecture on AGRICULTURAL CHEMISTRY by WM. BAER. Apply at JAMES W. SCOTT'S Drug and Chemical Store, 150 Baltimore street.

FOR SALE.

A fresh young COW, out of a Devon and Durham Cow, and a fine milker, by a full blood Holstein bull—she is a very fine milker for her age, being now 27 months old, and is of a large size—Price \$35. Apply to S. SANDS.

FOR SALE.

THE CELEBRATED CANADIAN STALLION MINGO CHIEF.

MINGO CHIEF was five years old last spring, near 15 hands high, of a rich brown colour, perfectly formed for speed and action, goes all gait naturally, and is very fast under the saddle. The Sire of Mingo Chief (grand sire of the famous trotting horse Beppo, and many other celebrated trotters and rackers); has racked his mile in 2-30. The dam of Mingo Chief was pure Canadian, and could trot a mile in 3 minutes without tiring. Mingo Chief was selected during the summer of 1841, in the neighborhood of Montreal, (by a gentleman experienced in these matters,) as being the best horse he could find to cross upon the stock of this part of the country for the production of Saddle Horses.

Address JOHN P. E. STANLEY, Baltimore, Md.

Or apply at No. 50, S Calvert street.

HUSSEY'S REAPING MACHINE.

Farmers are respectfully requested to send their orders as soon as they shall have decided on procuring machines to cut the next year's crop by doing so, they will enable the subscriber to make preparations early in year with confidence, so that none may be disappointed at harvest time, as has been the case for several years past by delaying to apply for them in season. His former practice will be steadily adhered to of making no more machines than are ordered, lest a failure of the next year's crop should leave a large number on his hands, unsold, which his circumstances will not allow. It is hoped that the great success which has attended the machines made for the last harvest will remove every doubt of their great value. Several persons have cut as high as 30 acres in a day with the last improved machines, while one gentleman with one of the old machines cut his entire crop of 72 acres in less than five days, without having a cradle in the field.

The greatest objection ever made to the machine was its heavy bearing on the shaft horse; this has been entirely removed by adding a pair of forward wheels to support the front of the machine, and a driver's seat at an extra expense of 20 dollars.

CORN & COB CRUSHER

The subscriber's Corn & Cob crusher which obtained the first premium over several competitors at the late Fair of the N. York State Agricultural Society held at Albany, N. Y. and is so highly recommended in the public prints, by farmers who have used them, will be kept constantly on hand for sale.

OBED HUSSEY

LIME—LIME.

The subscriber is prepared to furnish any quantity of Oyster Shell or Stone Lime of a very superior quality at short notice at their Kilns at Spring Garden, near the foot of Eutaw street Baltimore, and upon as good terms as can be had at any other establishment in the State.

He invites the attention of farmers and those interested in the use of the article, and would be pleased to communicate any information either verbally or by letter. The Kilns being situated immediately upon the water, vessels can be loaded very expeditiously. N. B. Wood received in payment at market price.

F. J. COOPER

FOR SALE.

A handsome thorough bred DURHAM BULL, about 6 or 7 months old, from very superior stock. Price \$65, deliverable in Baltimore. Apply to SAM. SANDS.

EASTMAN'S NEWLY INVENTED PLOUGH WITH CONCAVE LANDSIDE AND DOUBLE SHARE.

The subscriber has just invented a PLOUGH, with the above named peculiarities, viz: with a concave Landside and double share. The advantages to be derived from these improvements are expected to be as follows:—1st. That it will be kept in repair at considerable less expense than other Ploughs in use. 2d. That it will run more level either in deep or shallow ploughing. 3d. He believes that it will run much lighter to man and horses than any other Plough in use. With these advantages they are offered to the public, and if they are not realized to the purchasers after two days use, or they are not satisfied with them, they are requested to return them and receive their money back. The only size I can furnish at present is a large two horse Plough, the size of the Davis' 10 inch, as made by me.

J. S. EASTMAN,

Pratt street, between Charles and Hanover sts.

BARNABY & MOOERS' PATENT SIDE-HILL & LEVEL LAND PLOUGH.

To which was been awarded the following and Several other Premiums, viz.—By the American Institute, at their Ploughing Match at Newark, N. J. 1842, the First Premium, a Silver Cup—and at their Annual Ploughing-Match for 1841, at Sing Sing, N. Y. a Gold Medal for the best work done, lightest draught, and best principle of construction,—answering for "general purposes." The N. York State Agricultural Society, awarded it an Extra Premium of \$50, at their Annual Ploughing-Match at Syracuse for 1841.

The following are its advantages over the Common Plough, viz.—1st. Ease of Draught.—2d. Perfection of Work.—3d. Strength and Durability.—4th. All Dead Furrows may be prevented, as the Furrows can all be turned one way.—5th. Any width of Furrows may be turned, between 8 1/2 inches, by moving the catches in the cross-piece towards the handles for a wide Furrow,—and towards the centre for a narrow one.—6th. Placing the beam in the centre of the cross-piece, makes it a "Double Mould-Board Plough," turning a Furrow both ways at the same time,—answering for Green-Ridging, Ploughing between Corn and Potatoes, or any any crop cultivated in rows or drills,—and for Digging Potatoes.

The subscribers having purchased the Right to Manufacture the above celebrated Ploughs, for the State of Maryland, are now prepared to furnish Farmers with the same,—and they pledge themselves to the Public, to manufacture this Plough in the Very Best Manner, both as to materials and workmanship. All Orders will be thankfully received and punctually attended to.

Price as Follows, (adding Transportation.)—No. 2, 45lb. at \$7. No. 3, wt. 70 lb. \$10.—No. 4, 80 lb. \$11.—No. 5, 90 lb. \$12. Extra edge, 50 Cents. For Colter, if added, laid with steel, \$1.50. Wheel, \$1.50. Shin Pieces, 12 Cents.

DENMEADS & DANIELS, corner Monument and North-sts. who have purchased Mott & Co's interest, are now sole owners. B. H. WILSON, No. 52, Calvert st. 1 door below Lombard, is Agent for the sale of the above Plough. Baltimore, Nov 23, 1842

MILLWRIGHTING, PATTERN & MACHINE MAKING

By the subscriber, York, near Light st. Baltimore, who is prepared to execute orders in the above branches of business at the shortest notice, and warrants all mills, &c. planned and executed by him to operate well.

Murray's Corn and Cob Crushers for hand power \$25 Do. by horse power, from 6 to 12 bushels per hour, \$35 to \$40 Corn Shellers, shelling from 30 to 300 bushels an hour, \$15 to \$75 Portable and Stationary Horse Powers \$75 to \$150 Self-sharpening hand Mills, a superior article, \$12 to \$20 Cylinder Straw and Oat cutters, 2 knives, \$20 to \$35 Mill, carry log, and other Screws, 2 small Steam Engines 3 to 4 horse power. Any other machines built to order.

Patent rights for sale for the Endless Carriage for gang Saw Mills, a good invention.

Orders for crushers can be left with any of the following agents: Thos. Denny, Seedman, Baltimore; J. F. Callan, Washington, D. C.; Calvin Wing, Norfolk; S. Sands, Farmer office; or the subscriber, JAS. MURRAY, Millwright, Baltimore.

may 28

TO FARMERS.

The subscriber has for sale at his Plaster and Bone Mill on Hughes street, south side of the Basin, GROUND PLASTER, GROUND BONES, OYSTER SHELL & STONE LIME, and LEACHED ASHES, all of the best quality for agricultural purposes, and at prices to suit the times.

Vessels loading at his wharf with any of the above articles, will not be subject to charges for dockage or wharfage.

fe 23

WM. TREGO, Baltimore.

DEVON STOCK FOR SALE—A GREAT BARGAIN

A gentleman near this city being overstocked, and not wishing to winter so many cattle as he has now on hand, offers for sale the following blooded animals at the prices annexed—

1 full blooded Devon Bull, 18 months old; 2 full bred Devon Heifers, one 13, the other 20 months old, all represented as handsome well formed animals, and in fine order.—The three will be sold for \$100

Also a Bull and Heifer 6 months old, and a Heifer 14 mos. old, also full bred Devon, the three for \$75.

Apply at this office to

fe 8

S. SANDS.

FOR SALE—TWO DURHAM BULLS,

Raised by one of the first breeders in New England; who represents them as "first rate full blood animals, 3 years old last Fall; are excellent workers, having done for more than a year as much work on my farm as any yoke of 6 year old oxen; one is a dark red, the other a roan; they will thus suit a farmer for his ordinary farm work, and also serve his cows. I exhibited the yoke at the Fair of the American Institute, in New York, last Fall; they were much admired, and I was awarded a premium on them." They will be sold for \$160 the yoke, deliverable at Baltimore or any other city along the coast. Apply to

fe 8

S. SANDS.

MARTINEAU'S IRON HORSE-POWER

The above cut represents this horse-power, for which the subscriber is proprietor of the patent-right for Maryland, Delaware and the Eastern Shore of Virginia; and he would most respectfully urge upon those wishing to obtain a horse power, to examine this before purchasing elsewhere; for beauty, compactness and durability it has never been surpassed.

Thrashing Machines, Wheat Fans, Cultivators, Harrows and the common hand Corn Sheller constantly on hand, and for sale at the lowest prices.

Agricultural Implements of any peculiar model made to order as the shorest notice.

Castings for all kinds of ploughs, constantly on hand by the pound or ton. A liberal discount will be made to country merchants who purchase to sell again.

Mr. Hussey manufactures his reaping machines at this establishment. R. B. CHENOWETH, corner of Front & Ploughman sts. near Baltimore st. Bridge, or No. 20 Pratt street. Baltimore, mar 31, 1841

AGRICULTURAL MACHINERY,

Manufactured and for sale by A. G. MOTT & CO. South east corner of Ensor and Forest sts. near the Bel-air market, Old Town, Baltimore.

Being the only agents for this state, are still manufacturing WILEY'S PATENT DOUBLE POINTED COMPOSITION CAPT PLOUGH, which was so highly approved of at the recent Fair at Elliott's Mills, and to which was awarded the palm of excellence at the Govanstown meeting over the \$100 Premium Plough, Proulx's of Philadelphia; and Davis' of Baltimore, and which took the premium for several years at the Chester Co. Pa. fair.—This plough is so constructed as to turn either end of the point when one wears dull—it is made of composition metal, warranted to stand stony or rocky land as well as steel wrought shares—in the wear of the mould board there is a piece of casting screwed on; by renewing this piece of metal, at the small expense of 25 or 30 cts. the mould board or plough will last as long as a half dozen of the ordinary ploughs. They are the most economical plough in use.—We are told by numbers of the most eminent farmers in the state that they save the expense of \$10 a year in each plough. Every farmer who has an eye to his own interest will do well by calling and examining for himself. We always keep on hand a supply of Ploughs and composition Castings.—Price of a 1-horse Plough \$5; for 2 or more horses, \$10.

We also make to order other Ploughs of various kinds. MOTT'S IMPROVED LARGE WHEAT FAN, which was so highly approved of at the recent Fair at Elliott's Mills and at Govanstown, as good an article as there is in this country—prices from 22 to \$25.

A CORN SHELLER that will shell as fast as two men will throw in, and leave scarcely a grain on the cob nor break a cob, by manual power; price \$17.

CULTIVATORS with patent teeth, one of the best articles for the purpose in use, for cotton, corn and tobacco price \$4, extra set of teeth 1.

HARROWS of 3 kinds, from 7 to \$12.

GRAIN CRADLES of the best kind, \$4.

HARVEST TOOLS, &c.

Thankful for past favors we shall endeavor to merit a continuance of the same. ja 26 tf

CORN SHELLERS, CRUSHERS, STRAW CUTTERS, &c. &c.

Prices reduced in proportion to the present rate of labour and materials.—

The subscribers offer for Sale, Goldborough's Corn Sheller and Husking Machine,—warranted to shell or husk and shell 700 bushels of Corn per day by the power of two Horses.

Baldwin's Corn Sheller with blower attached.—This machine with the power of two horses will shell and clean ready for market 400 bushels of corn per day.

Baldwin's Corn & Cob Crusher,—warranted to grind 25 or 30 bushels of Corn & Cob per hour, and put in fine order for feeding stock. This is the most durable, simple in construction; and most powerful of any Crusher made in this Country, and best adapted for extensive farming establishments. The power of two horses is required to drive it.

Straw Cutters, Cylindrical Improved.—There are four sizes of these machines, which combine all the late improvements;—400 to 2000 bushels of hay, straw, cornstalks, &c. can be cut by them per day. Also, common Treadle, Evans' patent, and several other kinds STRAW CUTTERS, at low prices.

IN STORE,

Horse Powers, 2 sizes	Harrows, 5 kinds
Thrashing Machines, do	Rollers and Drill Machines
Vegetable Cutters	Yankee Ox Yokes
Fanning Mills, 2 sizes	Harvest Tools, all kinds
Churns, 3 sizes	Post hole Augurs
Lime Spreaders	PLOUGHS, 25 sorts, embracing
Grindstones, hung on friction	the Subsoil, and several other
rollers	kinds of late introduction

Garden and Field SEEDS, a large and general assortment

TREES and PLANTS do do do do

CATALOGUES of the above furnished gratis, giving prices and description of each machine—also directions for planting seeds, trees, &c. R. SINCLAIR, Jr. and CO.

no 30

Manufacturers & Seedsmen, 60 Light st.

FOR SALE—SHEEP AND HOGS.

Two Bucks, NEW LEICESTER breed, 1 year old this coming spring—and one Ewe, same breed, 2 years old. Also, 2 pairs of SOUTH-DOWN Sheep, about 2 years old. Price for the Rams, \$20—for the Ewes, \$15.

Also, 2 very superior SOWS, of the pure BERKSHIRE breed, selected for breeders, one 7, the other 8 mos. old, just been put to Gorsuch's imported boar Price \$15 each. Apply to Jan. 11 S. SANDS.